Remarks

In the present response, claims 1-2, 3-12, 15-19, 27-29, and 31-32 are presented for examination.

Claim Rejections: 35 USC § 103(a)

Claims 1-11, 27-29, and 31-32 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,236,366 (Yamamoto) in view of USPN 5,404,577 (Zuckerman). These rejections are traversed.

Claims 1-11, 27-29, and 31-32 recite one or more elements that are not taught or suggested in Yamamoto in view of Zuckerman. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art. Some examples are provided below for the independent claims.

As one example, claim 1 recites that the radio transceiver operates as an electromagnetic shield for one side of the antenna. Claim 27 recites that the radio transceiver operates as an electromagnetic shield for the antenna. Yamamoto in view of Zuckerman does not teach or suggest these claim elements.

On page 3 of the office action, the examiner argues as follows: "Regarding claim 2, Yamamoto disclose that a shield radio transceiver (13) (Fig. 7) operates as an electromagnetic shield for one side of the antenna (4) (Col. 10, line 21) (Fig. 7A)." This argument is incorrect. **Element 13 in Yamamoto is not a radio transceiver.** Element 13 in Yamamoto is a shielding plate. This shielding plate is incapable of functioning as a radio transceiver. Yamamoto explains:

> The electromagnetic shielding plate 13 is made of the same material as of the scaling cover 3 which is electrically conductive except its electromagnetic wave window 3 and is joined at uppermost to the sealing cover 3. (See column 10, lines 24-27).

Zuckerman also fails to cure this deficiency. In Zuckerman, Figs. 9-11 show a transceiver 52, speaker 55, and battery 68 in a housing 108. A microphone 54 is

suspended in plastic foam 109 located within the housing 108. Zuckerman never states or even suggests that the transceiver operates as an electromagnetic shield for the antenna 114.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, independent claims 1 and 27 and their dependent claims are allowable over Yamamoto in view of Zuckerman.

As another example, claim 1 recites a radio module having three elements: a radio transceiver, an antenna, and an electromagnetic shield. The electromagnetic shield is disposed around the antenna. However, "the radio transceiver is externally located outside the electromagnetic shield." Claim 27 recites disposing a radio transceiver outside of the shield and adjacent to the antenna so the radio transceiver operates as an electromagnetic shield for the antenna. Yamamoto in view of Zuckerman does not teach these elements.

Figure 1 in Yamamoto shows a semiconductor module with a built in antenna 4. A sealing cover 3 covers the antenna 3 and also circuits 6 and 7. The circuits 6 and 7 are located **inside** the cover 3.

Yamamoto further explains that the circuit in Fig. 4A can function as a radio transmitter or receiver signal processing circuit when it acts as a radio receiver (see column 8, lines 63-67). This circuit of Fig. 4A, however, is also located **inside** of the cover 3.

Figures 7A and 7B show embodiments for preventing electromagnetic interference. Here, the antenna 4 and circuit 6 are also located **inside** the cover 3.

Figures 8A and 8B "show an application of the semiconductor module with a built-in antenna including the equivalent circuit of FIG. 4B" (see column 10, lines 33-35). Again, the antenna and radio transmitter are all located **inside** the cover 3.

Zuckerman also fails to cure this deficiency. Thus, the differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, independent claims 1 and 27 and their dependent claims are allowable over Yamamoto in view of Zuckerman.

Allowable Subject Matter

Applicants sincerely thank the examiner for indicating allowance of claims 12 and 15-19. With these amendments, Applicants make a sincere effort to place this application in condition for allowance. The examiner is encouraged to telephone patent attorney Philip Lyren (832-236-5529) if further changes are required to place this application in condition for allowance.

Respectfully submitted,

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